CLAIMS:

linear motion coordinate, along which two magnetic configurations are disposed, each equipped with at least one pair of magnetic north and south poles, and disposed between the magnetic configurations is a magnetoresistive angle-sensor configuration, which is set up to measure the direction of a resultant magnetic field spanned by the magnetic configurations and extending between them in a measurement plane relative to a spatial reference direction lying in this measurement plane, wherein the motion coordinate is aligned at least largely at right angles to the measurement plane of the magnetoresistive angle-sensor configuration, and wherein magnetic axes of the two magnetic configurations extend essentially parallel to the measurement plane and projections of these magnetic axes onto the measurement plane are aligned to be offset by predetermined angles relative to one another, and wherein at least a first of the magnetic configurations is connected to the body and disposed to be mobile, together with the latter, relative to the magnetoresistive angle-sensor configuration along the motion coordinate.

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- 2. A configuration as claimed in claim 1, characterized in that a second of the magnetic configurations and the magnetoresistive angle-sensor configuration are disposed with fixed spacing between them along the motion coordinate.
- 3. A configuration as claimed in claim 1, characterized in that the first and the second magnetic configuration are connected to the body at a fixed distance from one another and disposed so they can be moved jointly with it relative to the magnetoresistive angle-sensor configuration along the motion coordinate.
- 4. A configuration as claimed in claim 1, 2 or 3, characterized in that the projections of the magnetic axes of the first and second magnetic configurations onto the measurement plane enclose an angle of at least virtually 90°.

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- 5. A configuration as claimed in any one of the preceding claims, characterized in that the body is a mobile component of a motor vehicle.
- 6. A configuration as claimed in claim 5, characterized in that the body is a mobile component of a combustion engine for a motor vehicle.
 - 7. A configuration as claimed in claim 5, characterized in that the body is a mobile component of a braking system for a motor vehicle.
- 10 8. A configuration as claimed in claim 5, characterized in that the body is a mobile component of a chassis for a motor vehicle.

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9. A configuration as claimed in claim 8, characterized in that the body is a mobile component of a shock absorber for a motor vehicle.